

**REMARKS**

Claims 1-10 are pending. Claims 11-18 were previously cancelled with the prior response. Reconsideration of the application is respectfully requested for at least the following reasons.

**I. REJECTION OF CLAIMS 1-5 AND 9 UNDER 35 U.S.C. § 103(a)**

Claims 1-5 and 9 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication No. 2003/0115447(Pham et al.) in view of U.S. Patent Application Publication 2004/0062267 (Minami et al.), and further in view of U.S. Patent Application Publication 2004/0243745 (Bolt et al.). Withdrawal of the rejection is respectfully requested for at least the following reasons.

***i. The Office Action fails to satisfy the necessary requirements for establishing a prima facie case of obviousness for rejection of claim 1, as the combination of Pham and Minami et al. is improper.***

To establish a *prima facie* case of obviousness requires that there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Further, if proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984). As will be set forth in greater below, it is respectfully submitted that the requisite motivation to combine together the cited references does not exist.

The Office Action asserts that it would have been obvious to one of ordinary skill in the art to send an outgoing data packet to the first processor, then a subsequent outgoing data packet to the second processor, then a further subsequent outgoing data packet to the first processor, and continuing in this alternating manner, for encryption due to the combined teaching of Pham et al. and Minami et al. However, it is

respectfully submitted that ***the requisite motivation to modify Pham et al. in accordance with Minami et al. does not exist.***

More particularly, Pham et al. teach a network media access architecture, as described above, which uses a load-balancing algorithm to ensure that data packets are distributed to one of a plurality of crypto processors 72<sub>1-N</sub> having a minimal load, thereby minimizing the occurrence of excessive load on any one of a plurality of crypto processor 72<sub>1-N</sub>. (See, par. [0095]). To facilitate data packet transfer Pham et al. teach that a new TCP connection is assigned to the crypto processor 72<sub>1-N</sub> with the least number of open TCP connections. (See, par. [0094]). ***The use of a load-balancing algorithm implies that a non-predetermined (e.g., non-sequential) distribution of data packets is necessary to prevent excessive load on any one processor.*** The load-balancing algorithm will respond to the present load distribution and set up a TCP connection to transfer data packets to a crypto processor 72<sub>1-N</sub> with the least number of open connections (*i.e.*, load balancing algorithm will distribute data packets to a crypto processor independent of the location the last data packet was sent). In contrast, Minami et al. teach a data packet transfer method which distributes data packets in an alternating manner between two encryption engines. This method does not look at the existing load of the encryption engine, but instead alternates data distribution between encryption engines in an alternating manner.

In certain situations, if the data distribution method of Minami et al. were applied to the network media access architecture of Pham et al. it ***would result in data packets being distributed to encryption engines not comprising the least number data packets, thereby causing excessive load on any one crypto processor during an activity peak.*** This is in contrast to the stated objective of the load-balancing algorithm which specifically attempts, “to minimize the occurrence of excessive load on any one crypto processor 72<sub>1-N</sub> during an activity peak within the media session.” (See, par. [0094], Ins. 12-14)., Therefore, ***combination of the teachings of Pham et al. with Minami et al., as asserted in the Office Action, would***

***frustrate the purpose of Pham et al.*** Accordingly, withdrawal of the rejection is respectfully requested.

Claims 2-8 depend upon claim 1 and adds further limitations thereto. Because Pham et al. do not teach the present invention of claim 1, and neither Minami et al. nor Bolt et al. remedy the deficiencies of Pham et al., claims 2-8 are not taught by the cited art. Accordingly, withdrawal of the rejection is respectfully requested.

- ii. ***No motivation or suggestion is present in the references to combine Pham et al. with Minami et al., and therefore the combination is improper.***

To establish a *prima facie* case of obviousness requires that there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Further such motivation cannot be conclusory, but instead must be ***apparent, and the analysis thereof should be made explicit.*** In re Kahn, 441 F.3d 977, 986 (Fed Cir. 2006). As will be set forth in greater below, it is respectfully submitted that the requisite motivation to combine together the cited references does not exist.

The Office Action asserts that it would have been obvious to one of ordinary skill in the art to send an outgoing data packet to the first processor, then a subsequent outgoing data packet to the second processor, then a further subsequent outgoing data packet to the first processor, and continuing in this alternating manner, for encryption due to the combined teaching of Pham et al. and Minami et al. However, it is respectfully submitted that ***the requisite motivation to modify Pham et al. in accordance with Minami et al. does not exist.***

More particularly, Pham et al. teach a network media access architecture comprising a network media access controller 60 that can operate as a network device to pass network data packets between the clients 16<sub>1-N</sub> and iSCSI targets 20. (See, par. [0046], Ins. 14-17). The network media access controller 60 receives data packets

comprising an IP packet 152 header field. (See, par. [0084], Ins. 4-5). The data packets are routed to one of a plurality of crypto processors 72<sub>1-N</sub> comprised within the network media access controller 60 based upon a TCP connection identification contained within the header of each network data packet. (See, par. [0094] and par. [0061]). Therefore, the network media access architecture taught by Pham et al. ***dictates data packet transfer to a particular crypto processor according to information stored in a data packet header.*** In contrast, Minami et al. teach a module which ***dictates data packet transfer without considering the content of the data packets.*** Minami et al. teach a module comprised of two parallel and identical encryption engines that, “are serviced in alternating order”. (See, par. [1746], Ins. 1-3). As will be more fully appreciated below, the requisite motivation to modify Pham et al. in accordance with Minami et al. does not exist since the method taught by the combination appears to have no advantage over the method presently implemented by Pham et al. and in fact complicates the network media access architecture.

In the method of data packet transfer taught by Pham et al. a load-balancing algorithm is used to assign a new TCP connection to one of a plurality of crypto processors 72<sub>1-N</sub>. (See, par. [0094]). The load-balancing algorithm ensures that data packets are distributed to one of a plurality of crypto processors 72<sub>1-N</sub> having a minimal load thereby minimizing the occurrence of excessive load on any one processor. (See, par. [0095]). A TCP connection identification is contained within the header of each network data packet and is used to route the data packet. (See, par. [0061], Ins. 7-8 and par. [0085], Ins. 3-6). In proxy operation, the plurality of crypto processors 72<sub>1-N</sub> terminate the TCP connections and independently initiate corresponding connections with external target iSCSI nodes (See, Par. [0061], Ins. 9-12). Therefore, the ***routing information comprised within the header*** is used for further routing after routing to the plurality of crypto processors 72<sub>1-N</sub> is performed and therefore ***the routing information cannot be removed to save space in the data packet.*** Moreover, introducing the teaching of Minami et al. into the network media access architecture of Pham et al. ***would cause an inconsistency within the method of data packet***

***transfer within the network media access architecture.*** Data packets would be transferred according to the header information in all cases except when being routed to the one of a plurality of crypto processor 72<sub>1-N</sub>. ***The introduction of the teaching of Minami et al. into the network media access architecture of Pham et al. would complicate it by introducing multiple transfer methods without providing any apparent advantage.*** Therefore, the requisite motivation to modify Pham et al. in accordance with Minami et al. does not exist and accordingly withdrawal of the rejection is respectfully requested.

Claims 2-8 depend upon claim 1 and add further limitations thereto. Because Pham et al. do not teach the present invention of claim 1, and neither Minami et al. nor Bolt et al. remedy the deficiencies of Pham et al., claims 2-8 are not taught by the cited art. Accordingly, withdrawal of the rejection is respectfully requested.

## **II. REJECTION OF CLAIMS 6 AND 8 UNDER 35 U.S.C. § 103(a)**

Claims 6 and 8 were rejected under 35 U.S.C. §103(a) as being obvious over Pham et al., Minami et al., and Bolt et al. as applied above, and further in view of U.S. Patent Publication 2003/0169877 (Liu et al.). Withdrawal of the rejection is respectfully requested for at least the following reasons.

As stated above, Pham et al. do not teach over the invention of independent claim 1. Claims 6 and 8 depend upon claim 1 respectively, and adds further limitations thereto. Because the primary reference does not teach the present invention of claim 1, and because Minami et al., Bolt et al., and Liu et al. fail to remedy the deficiencies in the primary reference, claims 6 and 8 are also non-obvious over the cited art. Accordingly, withdrawal of the rejection is respectfully requested.

## **III. REJECTION OF CLAIM 7 UNDER 35 U.S.C. § 103(a)**

Claim 7 was rejected under 35 U.S.C. §103(a) as being obvious over Pham et al., Minami et al., Bolt et al., and Liu et al. as applied above, and further in view of U.S.

Patent Publication 2004/0128553 (Buer et al.). Withdrawal of the rejection is respectfully requested for at least the following reasons.

As stated above, Pham et al. do not teach over the invention of independent claim 1. Claim 7 depends upon claim 1 respectively, and adds further limitations thereto. Because the primary reference does not teach the present invention of claim 1, and because Minami et al., Bolt et al., Liu et al., or Buer et al. fail to remedy the deficiencies in the primary reference, claim 7 is also non-obvious over the cited art. Accordingly, withdrawal of the rejection is respectfully requested.

#### **IV. REJECTION OF CLAIM 10 UNDER 35 U.S.C. § 103(a)**

Claim 10 was rejected under 35 U.S.C. §103(a) as being obvious over Pham et al., Minami et al., and Bolt et al. as applied above, and further in view of Patt , Patel, Evers, Friendly, and Start's "One Billion Transistors, One Uniprocessor, One Chip" (Patt et al.). Withdrawal of the rejection is respectfully requested for at least the following reasons.

As stated above, Pham et al. do not teach over the invention of independent claim 1. Claim 10 depends upon claim 1 respectively, and adds further limitations thereto. Because the primary reference does not teach the present invention of claim 1, and because Minami et al., Bolt et al. or Patt et al. fail to remedy the deficiencies in the primary reference, claim 10 is also non-obvious over the cited art. Accordingly, withdrawal of the rejection is respectfully requested.

#### **V. CONCLUSION**

For at least the above reasons, the claims currently under consideration are believed to be in condition for allowance.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should any fees be due as a result of the filing of this response, the Commissioner is hereby authorized to charge the Deposit Account Number 50-1733, AMDP751US.

Respectfully submitted,  
ESCHWEILER & ASSOCIATES, LLC

By /Thomas G. Eschweiler/  
Thomas G. Eschweiler  
Reg. No. 36,981

National City Bank Building  
629 Euclid Avenue, Suite 1000  
Cleveland, Ohio 44114  
(216) 502-0600